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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,553	03/06/2007	Thomas Retzbach	26202.500	4961

7590 12/24/2009  
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EXAMINER
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SALONE, BAYAN

ART UNIT	PAPER NUMBER
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3726

MAIL DATE	DELIVERY MODE
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12/24/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,553	<b>Applicant(s)</b> RETZBACH, THOMAS	
	<b>Examiner</b> BAYAN SALONE	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd (US Patent No. 5,997,010) in view of Haimer (US Patent No. 7,182,558).

3. Regarding Claims 1 and 6, Lloyd discloses an intermediary bushing (30) to be inserted into the central receptacle of a chuck with a cylindrical body (31) which has a central clamp hole (32) in the form of a through hole, the body having several radial slots (42) distributed along its outer circumference which extend over the whole axial length of the intermediary bushing (Col. 6, Line 61-Col. 7, Line 8, Fig. 1), and the outer contour (36), the slots (42) and the clamp hole (32) of the intermediary bushing are spark-eroded (Figs. 22-23), and that over its whole length the body has a through slot (40) extending from its outer circumference to the inner circumference.

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Lloyd does not explicitly disclose that the outer contour, the slots and the clamp hole of the intermediary bushing are spark-eroded, the slots have maximum width of 0.6 mm, or that the through slot has a maximum width of 0.6 mm.

Although Lloyd does not explicitly disclose that the outer contour, the slots and the clamp hole of the intermediary bushing are spark-eroded, Lloyd does disclose that the slots are created using an electrical discharge machining method (Col. 14, Lines 19-34, Fig. 22). It is well known to those of ordinary skill in the art that electrical discharge machining is a synonymous term for spark erosion. It would have been obvious to one of ordinary skill in the art at the time of invention for Lloyd to spark erode the outer contour and central clamp hole of the bushing, for the benefit of eliminating machining steps by easily cutting the contour of the bushing to form the clamp hole and slots.

Furthermore, regarding at least Claim 1, note that the limitations for a spark eroded outer contour, slots and clamp hole are “product-by-process” limitations. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (see

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MPEP 2113).

Haimer discloses wherein the slots of an intermediary bushing are formed having a width ranging from 0.1 mm to 0.3 mm (said width not exceeding a maximum width of 0.6 mm), for the benefit of weakening the cross section of the bush wall as little as possible (Col. 10, Lines 52-55). It would have been obvious to one of ordinary skill in the art at the time of invention to machine the slots and through slot of Lloyd to a width that does not exceed 0.3 mm as disclosed by Haimer, for the benefit of weakening the cross section of the bush wall as little as possible.

4. Regarding Claims 2 and 3, the combination as applied to claim 1 remains as previously applied. Lloyd does not disclose wherein the slots have a maximum width of 0.5 mm or wherein the through slot has a maximum width of 0.35 mm.

Haimer discloses wherein the slots of an intermediary bushing are formed having a width ranging from 0.1 mm to 0.3 (said widths not exceeding maximum widths of 0.35 mm or 0.5 mm respectively), for the benefit of weakening the cross section of the bush wall as little as possible (Col. 10, Lines 52-55). It would have been obvious to one of ordinary skill in the art at the time of invention to machine the slots and through slot of Lloyd to a width that does not exceed 0.3 mm as disclosed by Haimer, for the benefit of weakening the cross section of the bush wall as little as possible.

Regarding claims 7 and 8, the combination as applied to claims 1 and 6 remains as previously applied. Lloyd does not disclose wherein the slots or through slot have a maximum width of 0.3 mm.

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Haimer discloses wherein the slots of an intermediary bushing are formed having a width ranging from 0.1 mm to 0.3 (said widths not exceeding a maximum width of 0.3 mm respectively), for the benefit of weakening the cross section of the bush wall as little as possible (Col. 10, Lines 52-55). It would have been obvious to one of ordinary skill in the art at the time of invention to machine the slots and through slot of Lloyd to a width that does not exceed 0.3 mm as disclosed by Haimer, for the benefit of weakening the cross section of the bush wall as little as possible.

***Allowable Subject Matter***

Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for indicating allowable subject matter: The closest prior art of record is US Patent No. 5,997,0110 to Lloyd, US Patent No. 7,182,558 to Haimer and US Patent No. 5,028,178 to Ronen.

5. Lloyd discloses an intermediary bushing (30) to be inserted into the central receptacle of a chuck with a cylindrical body (31) which has a central clamp hole (32) in the form of a through hole, the body having several radial slots (42) distributed along its outer circumference which extend over the whole axial length of the intermediary bushing (Col. 6, Line 61-Col. 7, Line 8, Fig. 1), and the outer contour (36), the slots (42) and the clamp hole (32) of the intermediary bushing

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are spark-eroded (Figs. 22-23), and that over its whole length the body has a through slot (40) extending from its outer circumference to the inner circumference.

Haimer discloses wherein the slots of an intermediary bushing are formed having a width ranging from 0.1 mm to 0.3 mm (said width not exceeding a maximum width of 0.6 mm) (Col. 10, Lines 52-55).

Ronen discloses a coolant supply duct which extends between the end (10') of the chuck body (10) on the machine side and the receptacle, so as to supply the end of a tool (40) pushed into the receptacle on the machine side with a coolant (Col. 2, Lines 48-55, Figs. 2-2b).

No prior art of record discloses **a tool chuck** in which a central receptacle is formed for the shaft of a tool to be clamped, and further including the claimed coolant supply duct, wherein an intermediary bushing being inserted into the receptacle is characterized in that the intermediary bushing is formed according to applicant's claim 1.

Furthermore, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of Lloyd, Haimer and Ronen, and thus, for at least the foregoing of reasoning, the prior art of record does not render obvious the present invention as set forth in claim 4.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BAYAN SALONE whose telephone number is (571)270-7739. The examiner can normally be reached on M-Th, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571)-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAYAN SALONE/  
Examiner, Art Unit 3726

/DAVID P. BRYANT/  
Supervisory Patent Examiner, Art Unit 3726